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| 09/768,851      | 01/23/2001  | Kenichi Sanpei       | 450100-02949        | 3091             |

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| EXAMINER |
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MISLEH, JUSTIN P

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| ART UNIT | PAPER NUMBER |
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2612

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/768,851

Applicant(s)

SANPEI, KENICHI

Examiner

Justin P Misleh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Drawings*

2. Figures 5 and 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1 – 10** are rejected under 35 U.S.C. 102(b) as being anticipated by Parulski et al.
5. For **Claims 1 and 6**, Parulski et al. disclose, as shown in figures 1, 4, 5, 8, and 9 and as stated in columns 4 (lines 49 – 59), 5 (lines 54 – 67), 6 (lines 1 – 14, 19 – 22, and 26 – 33), 8 (lines 6 – 67), and 9 (lines 1 – 8), an image photographing apparatus and method of operating thereof for photographing a still image, comprising:

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a scanning imaging device (sensor 20; see figure 4) for generating image signals; and  
a control means (processor section 35; see figure 1) for using the image signals generated by said imaging device (sensor 20) to adjust the still image before photographing (As shown in figure 9, adjustment of focus is performed before photographing), said control means (processor section 35) defining a detection area (central focusing area 66) on said imaging device (sensor 20) and reading only the image signals within the detection area (central focusing area 66) out of said imaging device (sensor 20), the read image signals being used to adjust the still image before photographing.

Parulski et al. states, in column 4 (lines 54 – 66), “FIG. 4 shows a representative portion of the image sensor 20 which provides the data used to focus the image in the focusing operating mode. Only a small number of lines in a central focusing area 66 of the image are used to provide the focus determination input data. For the progressive scan sensor, the other lines in the outer area 68 are quickly read from the image by continuously holding the fast dump structure 62 at a high positive potential, as the vertical clocks are cycled high and low to transfer lines of charge to the substrate via the fast dump drain. Since the image charge for the non-used lines are quickly flushed from the sensor, this operation is referred to as a ‘fast flush’ and the focus mode is thus described as a fast flush focus mode.”

6. As for **Claims 2 and 7**, Parulski et al. disclose an image photographing apparatus and method of operating thereof according to Claim 1/6, respectively, wherein said control means (processor section 35) also controls said imaging device (sensor 20) when the still image is being photographed.

Parulski et al. states, in column 4 (lines 28 – 39), “The output of the image sensor 20 is amplified and processed in an analog gain and sampling (correlated double sampling (CDS)) circuit 32, and converted to digital form in A/D converter 34. The A/D output signal is provided to a processor section 35, which includes a digital processor 36 which temporarily stores the still images in a DRAM memory 38. The digital processor 36 then perform image processing on the still images, and finally stores the processed images on the removable memory card 26 via a memory card interface circuit 40, which may use the PCMCIA 2.0 standard interface. An EPROM memory 42 is used to store the firmware which operates the digital processor 36.”

7. As for **Claims 3 and 8**, Parulski et al. disclose an image photographing apparatus and method of operating thereof according to Claim 1/6, respectively, wherein said control means (processor section 35) determines a start position of the detection area (central focus area 66) and the amount of image to be read out within the detection area, and, accordingly, only the image signals within the detection area (central focus area 66) are read out of the said imaging device (sensor 20).

Parulski et al. states, in column 4 (lines 22 – 28), “Control of the sensor 20 is provided by a timing and control section 27, which specifically includes a sensor timing circuit 28. The sensor timing circuit 28 provides the signals to enable sensor drivers 30, which provides horizontal clocks (H1, H2) and vertical clocks (V1, V2), as well as a signal FDG for activating a drain structure on the sensor 20.”

Furthermore, Parulski et al. states, in column 6 (lines 26 – 34), “In the autofocus mode, the timing and control section 27 controls the fast dump structure 62 to A) eliminate all lines of image charge in the outer area 68 (FIG. 4) outside the central focusing area 66, and B) eliminate

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at least one line of image charge from the image sensor 20 for every one or more lines of image charge that are transferred to the horizontal register 60 for readout from the central focusing area 66.”

8. As for **Claims 4 and 9**, Parulski et al. disclose an image photographing apparatus and method of operating thereof according to Claim 1/6, respectively, wherein said control means (processor section 35) allows a high-speed scan in a region (outer areas 68) before the start position of the detection area (central focus area 66), allows a predetermined-speed scan in the detection area, and allows only the determined amount of image signals to be read out.

Parulski et al. states, in column 4 (lines 54 – 66), “FIG. 4 shows a representative portion of the image sensor 20 which provides the data used to focus the image in the focusing operating mode. Only a small number of lines in a central focusing area 66 of the image are used to provide the focus determination input data. For the progressive scan sensor, the other lines in the outer area 68 are quickly read from the image by continuously holding the fast dump structure 62 at a high positive potential, as the vertical clocks are cycled high and low to transfer lines of charge to the substrate via the fast dump drain. Since the image charge for the non-used lines are quickly flushed from the sensor, this operation is referred to as a ‘fast flush’ and the focus mode is thus described as a fast flush focus mode.”

9. As for **Claims 5 and 10**, Parulski et al. disclose an image photographing apparatus and method of operating thereof according to Claim 1/6, respectively, wherein, based on the read image signals, at least one of automatic focus control, automatic photographic sensitivity control, and automatic white balance control is performed.

Parulski et al. performs automatic focus control on the read image signals.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following is a brief description of the prior art made of record.

- **Suga et al. and Hashimoto et al.**, in the very least, provide a detection area within an image sensor wherein the detection area is the only area of the image sensor read out for the purposes of automatic focus control.
- **Miyahara, Kikuchi et al., and Hirota et al.** simply provide a detection area within an image sensor wherein the detection area is the only area of the image sensor read out for the purposes of high-speed imaging.


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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 703.305.8090. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 5:30 PM and on alternating Fridays from 7:30 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy R Garber can be reached on 703.305.4929. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM  
April 21, 2004

  
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